

**REMARKS**

Claims 19-26 and 28-29 are pending in the application.

**The Outstanding Rejections**

The Examiner rejected claims 25-26 under 35 U.S.C. §112, second paragraph as allegedly being indefinite.

The Examiner rejected claims 19-26 and 28-29 under 35 U.S.C. §103(a) as allegedly being unpatentable over Chadwick *et al.* in view of Harlow *et al.* or Campbell *et al.*

**Amendments to the Specification**

In order to comply with the general standards for drawings under 37 C.F.R. §1.84, each one of Figures 1-9 have been separated into multiple figures (*e.g.* Figure 1 has been separated into Figures 1A, 1B, 1C, 1D, 1E, and 1F). Lines of text in the specification indicating precisely where replacement paragraphs are to be added were determined by counting down from the top of each page, and not by using the numbers in the left margin, which do not accurately correspond to the respective lines. Figures 2, 3, 8, and 9 (now Figs. 2A, 2B, 2C; 3A, 3B, 3C, 3D; 8A, 8B, 8C, 8D; and 9A, 9B, 9C, 9D, and 9E, respectively) have also been amended by double-underlining identical residues (originally having dark background), and single-underlining conserved residues (originally having gray background). Amendments to corresponding paragraphs of the specification also reflect these changes. Spaces in the sequences in these same figures, originally indicated by dots, have also been amended to be reflected as dashes. Additionally, in Figure 3 (now Figs. 3A, 3B, 3C, and 3D), “chickATPase” has been amended to “chiATPase” in order for the figures to comply with the margin requirements of 37 C.F.R. §1.84(g). Finally, Figures 2, 8, and 9 (now Figs. 2A, 2B, 2C; 8A, 8B, 8C, 8D; and 9A, 9B, 9C, 9D, and 9E, respectively) have also been amended by deleting dashes at the ends of the sequences (C-terminal) depicted therein, which is clear from the final amino acid residue depicted for each sequence.

**Patentability Arguments****1. 35 U.S.C. §112, second paragraph Rejection**

The Examiner rejected claims 25-26 under 35 U.S.C. §112, second paragraph. Applicants have amended the claims following the Examiner's suggestions. In light of the amended claims, Applicants respectfully request that the 35 U.S.C. §112 rejections be withdrawn.

**2. 35 U.S.C. §103(a) Rejection**

The Examiner rejected claims 19-26 and 28-29 using Chadwick *et al.* (the Chadwick reference) in view of Harlow *et al.* or Campbell *et al.* Applicants respectively disagree. The Examiner alleges that the cited references render the instant invention obvious by the disclosure of a CD39L4-like polypeptide in the Chadwick reference. However the Chadwick reference is work done by the inventors of the instant application, Chadwick and Frischauf. The Rule 1.132 declaration submitted herewith (herein referred to as the Funk Declaration) shows that the Chadwick reference is a publication of Applicant's own invention. The inventors of the instant application, Chadwick and Frischauf, are the sole authors of the Chadwick reference and are the sole inventors of the subject matter of both the Chadwick reference and the instant application. Therefore, since the Chadwick reference represents Applicant's own work, it cannot be cited against Applicant and should be withdrawn, thereby removing the reference from the 103(a) rejection. Furthermore, the Chadwick *et al.*, paper does not constitute a bar under 35 U.S.C. §102(b) in that it was published less than one year before the effective filing date of the instant application. In light of the aforementioned remarks, Applicants respectfully request that the 35 U.S.C. §103(a) rejection be withdrawn.

**CONCLUSION**

On the basis of the foregoing amendments and remarks, Applicants respectfully submit that the pending claims are in condition for allowance, and a Notice of Allowance is respectfully requested as soon as possible. If there are any questions regarding these amendments and remarks, or if further discussion would expedite allowance of the claims, the Examiner is encouraged to contact the undersigned at the telephone number provided below.

Respectfully submitted,

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